

## **REMARKS**

### **Rejection under 35 U.S.C §112**

The Office rejected claims 1, 10, 14 and 23 under 35 U.S.C. § 112, first paragraph, as not complying with the written description requirement. The Office stated that the "claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention." Specifically, the Office stated that this requirement was not met for the term "set to zero when fill condition of is above a predetermined level." As none of the cited claims contains the term as quoted, Applicants presume that the Office's intent is to paraphrase various similar terms in the claims and will address those amendments by addressing claim 1, by way of example.

The first paragraph of 35 U.S.C. 112 requires that the "specification shall contain a written description of the invention \* \* \*." This requirement is separate and distinct from the enablement requirement. See MPEP 2163, Section I. The 'written description' requirement implements the principle that a patent must describe the technology that is sought to be patented; the requirement serves both to satisfy the inventor's obligation to disclose the technologic knowledge upon which the patent is based, and to demonstrate that the patentee was in possession of the invention that is claimed. *Ibid.* An applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. *Ibid.* Possession may be shown in a variety of ways including description of an actual reduction to practice, or by showing that the invention was "ready for patenting" such as by the disclosure of drawings or structural chemical formulas that show that the invention was complete, or by describing distinguishing identifying characteristics sufficient to show that the applicant was in possession of the claimed invention. *Ibid.* There is no requirement that the exact language of claim limitations be set forth in the specification. Rather, it is sufficient if the newly added claim limitations are supported in the specification through express, implicit, or inherent disclosure. MPEP 2163, Section I.B.

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The claim terms of claims 1, 10, 14, and 23 related to the term recited by the Office are supported in the specification. For example, but not limited to, paragraph [0012] of the present application as published (US2005/0226155) describes: "... as soon as any committed (green) traffic 24 arrives, it is applied directly to the first leaky bucket 12, F<sub>c</sub> becomes non-zero and the second buckets 14-20 are prevented from further emptying". It should be apparent to a person skilled in the art that these words describe the claim terms at issue. For example, claim 1 recites "the second transmission rate being set to zero ("the second buckets 14-20 are prevented from further emptying") when a fill condition of the first bucket is above a predetermined level ("F<sub>c</sub> becomes non-zero")" (emphasis added).

Rejection under 35 U.S.C §103(a)

The Office rejected claims 1-10, 13-23 and 26 under 35 U.S.C. §103(a) as being unpatentable over US Application 20040151184 by Wang et al., hereinafter referred to as Wang; and in view of US Patent 5,596,576 to Milito et al., hereinafter referred to as Milito.

Applicants respectfully traverse the rejections.

Claim 1 of the present application is directed to a data traffic policer comprising a classifier, a first bucket and a second bucket. The classifier separates a packet stream into a first class of traffic to be represented by a first bucket as a first transmission rate and a first burst capacity, and a second class of traffic to be represented by a second bucket as a second transmission rate and a second burst capacity. The first bucket represents the first transmission rate and first burst capacity for the first class of traffic. The second bucket represents the first transmission rate and first burst capacity for the second class of traffic, and is subordinate to the first transmission rate and the first burst capacity. The second transmission rate is set to zero when the fill condition of the first bucket is above a predetermined level.

Claim 14 is a method claim and generally parallels claim 1.

The applied references fail to disclose or suggest the inventions defined by Applicants' claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

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In fact, as set out below, both Wang and Milito teach away from Applicants' claimed embodiment of setting the transmission rate of a second class from a second bucket to zero when a fill condition of the first bucket is above a predetermined level.

Wang teaches a rate control apparatus with an egress rate controller 200 having a classifier 202 and an ingress rate controller 300 having a classifier 302. In the egress direction, Wang teaches the use of "packet forwarding suppression" "with the intent that the packets will be transmitted at a later time" and a suppression controller 204 provides its suppression signal 214 to a scheduler 212. See paragraphs [0034] and [0035] of Wang. In the ingress direction, "[a]ctual packets of a particular traffic class are randomly discarded with the discard probability specified in the corresponding discard probability register 316". See paragraph [0052] of Wang. Classifiers 202 and 302 are classifying two unrelated classes of traffics in opposite directions, therefore, the traffic classified by the two classifiers for buckets transmitting in opposite directions are irrelevant and unrelated to the multi-bucket data traffic policing as claimed in the present application. Additionally, Figs. 2 and 3 represent three separate "exemplary egress control scenarios" and therefore do not represent multi-bucket traffic policing.

More importantly, Wang teaches the use of "multiple token availability thresholds in respect of a single leaky bucket." See paragraph [0040] of Wang (emphasis added). Additionally, the scheduling of lower priority traffic classes from the single bucket is enabled selectively by "egress rate control" effected by a separate suppression controller. See paragraph [0037] of Wang. Therefore, in addition to teaching away from the use of multiple buckets to represent the transmission rate and burst capacity of multiple traffic classes as claimed, Wang actually teaches away from the use of multiple buckets to effect rate control of multiple traffic classes.

The Offices admitted that Wang fails to teach the second bucket being subordinate to the first transmission rate and the first burst capacity of the first bucket, but stated that Milito teaches plurality bucket technology of subordinate bucket at Fig. 6, col. 6, lines 45-60.

Applicants respectfully disagree.

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Milito teaches a method "for allocating access to a shared limited resource ..., the allocation being made such that each user is granted access to the resource at a minimum guaranteed rate" by "assigning tokens to each user at a rate determined by the minimum guaranteed rate associated with each user; storing tokens assigned to each user in a bank associated with each user,... and allowing a user requesting access to the resource to have access to the resource if the user has a predetermined number of tokens in its associated bank and otherwise denying access to the resource" (emphasis added). See Abstract of Milito.

Milito discloses two embodiments using token and leaky bucket. In the first embodiment certain classes are able to withdraw a token from the common bank  $B_0$  first, and use their own banks only when the common bank is full. See column 4, lines 58-63 of Milito.

In the second embodiment, the system redistributes the excess tokens generated by users operating below their contacted capacity, to certain selected users. See column 5, lines 1-5 of Milito. In other words, whenever bucket  $LB_i$  is empty, its capability to drain at rate  $r_i$  is distributed among the non-empty buckets. See column 6, lines 53-56 of Milito.

Clearly, Milito also teaches away from the claimed exclusivity for the first class traffic in the first bucket of the present application.

Applicants respectfully note that it has been judicially determined that "[w]hen the prior art teaches away from combining certain known elements, discovery of successful means of combining them is more likely to be nonobvious." *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d at 1395 (2007).

Claims 2-10, 13, 15-23, and 26 are dependent claims which further distinguish the invention, and which are allowable for the same reasons as their respective independent base claims.

Applicants respectfully request reconsideration and withdrawal of this rejection in view of the above comments.

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